Amendments to Claims

1. (original) A composition, comprising,
   (a) (i) a first polymer having at least one intact amide acetal groups attached to a molecule of said first polymer;
   (ii) a crosslinking agent containing first functional groups which react with hydroxyl groups or secondary amines, provided that said crosslinking agent has an average of at least two first functional groups per molecule of said crosslinking agent;
   (iii) optionally at least one solvent; and
   (iv) optionally at least one catalyst for the reaction of said hydroxyl groups or secondary amines with said first functional groups; and at least one second catalyst for hydrolysis of said amide acetal groups;

and

   (b) (i) a second polymer having second functional groups which react with hydroxyl groups or secondary amines, provided that said second polymer has an average of at least two second functional groups per molecule of said second polymer;
   (ii) a compound containing at least one intact amide acetal group;
   (iii) optionally at least one solvent; and
   (iv) optionally at least one first catalyst for the reaction of said hydroxyl groups or secondary amines with said second functional groups; and at least one second catalyst for hydrolysis of said amide acetal groups.

2. (original) A composition, comprising,
   (a) (i) a first polymer having at least one intact amide acetal group attached to a molecule of said first polymer;
   (ii) a crosslinking agent containing first functional groups which react with hydroxyl groups or secondary amines, provided that said crosslinking agent has an average of at least two first functional groups per molecule of said crosslinking agent;

(iii) water; and

(iv) optionally at least one or more solvent;

(v) optionally at least one first catalyst for the reaction of said hydroxyl groups or secondary amines with said first functional groups; and optionally at least one second catalyst for hydrolysis of said amide acetal groups;

and

(b) (i) a second polymer having second functional groups which react with hydroxyl groups or secondary amines, provided that said second polymer has an average of at least two second functional groups per molecule of said second polymer;

(ii) a compound containing at least one intact amide acetal group;

(iii) water; and

(iv) optionally at least one or more solvent;

(v) optionally at least one first catalyst for the reaction of said hydroxyl groups or secondary amines with said first functional groups; and optionally at least one second catalyst for hydrolysis of said amide acetal groups.

3. (original) A process for the crosslinking of a polymeric composition, comprising, exposing said polymeric composition in the uncrosslinked form to water to crosslink said polymeric composition, provided that said polymeric composition comprises,

(a) (i) a first polymer having at least one intact amide acetal group attached to said first polymer;

(ii) a crosslinking agent containing first functional groups which react with hydroxyl groups or secondary amines, provided that said crosslinking agent has an average of at least two first functional groups per molecule of said crosslinking agent; and

(iii) optionally at least one solvent; and

(iv) optionally at least one catalyst for the reaction of said hydroxyl groups or secondary amines with said first functional groups;

and at least one second catalyst for hydrolysis of said amide acetal groups;

and

(b) (i) a second polymer having second functional groups which react with hydroxyl groups or secondary amines, provided that said second polymer has an average of at least two second functional groups per molecule of said second polymer;

(ii) a compound containing at least one intact amide acetal group;

(iii) optionally at least one solvent; and

(iv) at least one first catalyst for the reaction of said hydroxyl groups or secondary amines with said second functional groups; and at least one second catalyst for hydrolysis of said amide acetal groups.

4. (original) A process for forming a crosslinked coating, comprising,

(A) applying a polymeric coating composition to a substrate in an uncrosslinked form;

(B) exposing said polymeric coating composition in an uncrosslinked form to water; and

(C) allowing said polymeric coating composition in an uncrosslinked form to crosslink, provided that said polymeric composition comprises,

(a) (i) a first polymer having at least one intact amide acetal group attached to said first polymer;

(ii) a crosslinking agent containing first functional groups which react with hydroxyl groups or secondary amines, provided that said crosslinking agent has an average of at least two first functional groups per molecule of said crosslinking agent; and

(iii) optionally at least one or more solvent;

(iv) optionally at least one first catalyst for the reaction of said hydroxyl groups or secondary amines with said first functional groups; and optionally at least one second catalyst for hydrolysis of said amide acetal groups;

and

(b) (i) a second polymer having second functional groups which react with hydroxyl groups or secondary amines, provided that said second polymer has an average of at least two second functional groups per molecule of said second polymer;

(ii) a compound containing at least one intact amide acetal group; and

(iii) optionally at least one or more solvent;

(iv) optionally at least one first catalyst for the reaction of said hydroxyl groups or secondary amines with said first functional groups; and optionally at least one second catalyst for hydrolysis of said amide acetal groups.

5. (original) The composition as recited in Claim 1 which is reacted with water to form a crosslinked polymeric material.

6. (original) The composition as recited in Claim 2 which is reacted with water to form a crosslinked polymeric material.

7. (original) The composition as recited in Claim 1 which is a coating composition.

8. (original) The composition as recited in Claim 2 which is a coating composition.

9. (original) The coating composition as recited in Claim 7 or Claim 8 wherein the functional group that can react with the hydroxyl groups or the secondary amines is isocyanate.

10. (original) The composition as recited in Claim 7 or Claim 8, wherein the composition further comprises additives selected from group consisting of pigments, stabilizers, rheology control agents, flow agents, toughening agents, fillers, and combinations thereof.

11. (original) The composition as recited in Claim 10, wherein the additive is a pigment.

12. (original) The composition as recited in Claim 7 or Claim 8, wherein the composition further comprises materials selected from group consisting of

functionalized oligomers, polyaspartic esters, binder of a noncyclic oligomer, binder of an acrylic polymer, polyester, binder of a dispersed acrylic component, and combinations thereof.

13. (original) A substrate coated with a coating composition as recited in Claim 7 or Claim 8.

14. (original) The product of the process of Claim 3 which is crosslinked.

15. (original) The product of the process of Claim 4 which is crosslinked.

16. (original) The product of Claim 3 which is a coating.

17. (original) The coating composition as recited in Claim 7 or Claim 8 wherein the number average molecular weight of the second polymer is less than about 3000.

18. (original) The coating composition as recited in Claim 17, wherein the second polymer has isocyanate functionality.

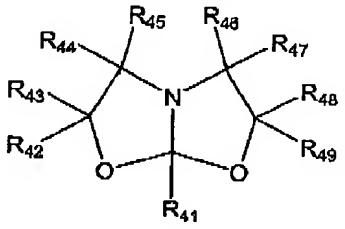
19. (New) The process of Claim 3 or Claim 4, wherein said crosslinking agent is selected from the group consisting of silane, anhydride, melamine and epoxy.

20. (New) The composition of Claim 1 or Claim 2, wherein said crosslinking agent is selected from the group consisting of silane, anhydride, melamine and epoxy.

21. (New) The process of Claim 19, wherein said crosslinking agent is melamine.

22. (New) The composition of Claim 20, wherein said crosslinking agent is melamine.

23. (New) An amide acetal composition, comprising:



wherein R_{41}-R_{49} independently represent a hydrogen, C_1-C_{20} alkyl, C_1-C_{20} alkenyl, C_1-C_{20} alkynyl, C_1-C_{20} aryl, C_1-C_{20} alkyl ester, or C_1-C_{20} aralkyl group, said alkyl, alkenyl, alkynyl, aryl, or aralkyl may each have one or more substituents selected from the groups consisting of halo, alkoxy, nitro, amino, alkylamino, dialkylamino, cyano, alkoxy silane and amide acetal (difunctional) and carbamoyl

24. (New) The amide acetal composition of Claim 23, wherein R41 represents a hydrogen, C1-C20 alkyl, C1-C20 alkenyl, C1-C20 alkynyl, C1-C20 aryl, C1-C20 alkyl ester, or C1-C20 aralkyl group, said alkyl, alkenyl, alkynyl, aryl, or aralkyl may each have one or more substituents selected from the groups consisting of halo, alkoxy, nitro, amino, alkylamino, dialkylamino, cyano, alkoxy silane and amide acetal (difunctional) and carbamoyl, and R42-R49 are each independently selected from the group consisting of hydrogen and C1-C20 alkyl.

25. (New) The composition of Claim 1 or Claim 2 comprising the amide acetal of Claim 23.

26. (New) The composition of Claim 1 or Claim 2 comprising the amide acetal of Claim 24.

27. (New) The composition of Claim 23,wherein one or more R substituents are selected from the group consisting of isocyanate, hydroxyl, methacryloxy, silane, fluoro and urethane.

28. (New) The composition of Claim 24, wherein R41 is selected from the group consisting of isocyanate, hydroxyl, methacryloxy, silane, fluoro and urethane.

29. (New) The composition of Claim 1 or Claim 2 comprising the amide acetal of Claim 28.

30. (New) The composition of Claim 1 or Claim 2, wherein the amide acetal has more than one functional group.

31. (New) The composition of Claim 1 or Claim 2 used as a coating over a color coat in a basecoat/clearcoat system.

32. (New) The composition of Claim 1 or Claim 2, wherein the compound containing at least one intact amide acetal group is 1-Aza-(3,7-dimethyl-5-undecyl)-4,6-dioxabicyclo(3.3.0)octane.